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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/407,664 09/28/99 KEELEY

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EXAMINER

TM02/1102

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ART UNIT

PAPER NUMBER

2163

DATE MAILED:

11/02/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/407,664

Applicant(s)

KEELEY, THOMAS M.

Examiner

Rebecca M Bachner

Art Unit

2163

— The MAILING DATE of this communication appears on the cover sheet with the correspondence address —
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 September 1999.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 September 1999 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2. 6) ☐ Other:

Detailed Action

This is a first office action on the merit. Claims 1-39 are pending.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claim 29 is rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. A single means claim, i.e., where a means recitation does not appear in combination with another recited element of means, is subject to an undue breadth rejection under 35 U.S.C. 112, first paragraph. In re Hyatt, 708 F.2d 712, 714-715, 218 USPQ 195, 197 (Fed. Cir. 1983). Also see MPEP 2164.08(a).

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 26 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. A signal cannot be comprised of an algorithm, as an algorithm represents a particular signal. It is vague and indefinite as to how a "signal" can be an "algorithm" since an algorithm is a mathematical expression.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 26-28 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 26 discusses a signal that is transmitted and is comprised of an algorithm. A signal is a naturally occurring phenomenon. Claim 26 also states that a signal is comprised of an algorithm. An algorithm is an abstract idea represented in a mathematical form. Therefore claim 26 taken as a whole is rejected based on non-statutory subject matter. Claim 27 also claims a signal and that the signal comprises a message. A message is just a grouping of data. Since claim 27 is claiming a signal that comprises of pieces of data, this claim is rejected due to non-statutory subject matter. Claim 28 is rejected because it claims the signal in claim 27. Claiming a signal is non-statutory as it is a naturally occurring phenomenon.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-39 are rejected under 35 U.S.C. 102(b) as being anticipated by Ogushi et al (EP 0822473 P.N.)

As per claim 1, Ogushi et al. disclose a factory automation system for providing status information on at least one factory comprising a factory automation component distributed by a first party, the component residing at a site location of a second party, and the component periodically communicating status information to the first party wherein the first party compiles the status information from the component and utilizes the status information to the benefit of the second party (see column 1, lines 32-41, a remote maintenance system between two parties).

As per claim 2, Ogushi et al. disclose all the limitations of claim 1, and further that the first party is a vendor and/or service supplier of the component (see column 2, lines 16-32).

As per claim 3, Ogushi et al. disclose all the limitations of claim 1, and further state that the second party is a purchaser of the component and the site location is a factory of the purchaser where the component resides (see column 2, lines 16-32).

As per claim 4, Ogushi et al. disclose all the limitations of claim 1, and further state that the component communicated component health information to the first party from the location of the second party (see column 1, lines 42-56, the monitor allows the remote maintenance system to obtain status information and any occurrence of trouble, this information is the health of the component).

As per claim 5, Ogushi et al. disclose all the limitations of claim 4, and further state that the health information is selected from the group consisting of a component

failure, a component degradation and a component out of calibration (see column 1, lines 6-14, maintenance is defined as any trouble with the industrial equipment that would need maintenance personnel to resolve the trouble, this inherently includes component failure, degradation and calibration).

As per claim 6, Ogushi et al. disclose all the limitations of claim 4, and further state that the site of the first party communicates patch information to the component in response to the health information from the component (see column 6, lines 9-19, the vendor responds to the components health information by communicating information back to the component).

As per claim 7, Ogushi et al. disclose all the limitations of claim 1, and further state that the component communicates version information to the server site of the first party from the location site of the second party (see column 5, lines 34-43, the factory host computer communicates version information, along with all other information relating to the component's health, to the vendor).

As per claim 8, Ogushi et al. disclose all the limitations of claim 7, and further state that the server site of the first party communicates version upgrade information to the component in response to version information from the component that does not correspond to the latest version (see column 4, lines 18-28, the first party must communicate version information from the component because this information must also be known by the first party, or vendor, in order for them to update the version; if the current version was unknown, the software could not be updated).

As per claim 9, Ogushi et al. disclose all the limitations of claim 1, and that the server site of the first party transmits a signal to the component in response to status information from the component that initiates an action by the component (see column 5, lines 17-39 and figure 3, the first party transmits the countermeasure in response to the status information by a signal over the internet to the host computer and the component at the factory; if a countermeasure is unavailable, the vendor notifies a person of the equipment status).

As per claim 10, Ogushi et al. disclose an internet business communication system including a website adapted to be employed by a vendor for receiving factory automation component status information over the internet from a plurality of factory components residing at one or more customer sites, each component having a different IP address, the website matching component information residing at the vendor's website with the IP address of the component and providing this information to the vendor (see column 3, lines 29-57, the maintenance system uses the internet and the world wide web as a means of communicating status information from the factory to the vendor, it also uses TCP/IP protocol and therefore each component inherently has an IP address).

As per claim 11, Ogushi et al. disclose all the limitations of claim 10, wherein the status information includes components health information. Such that the vendor can communicate with a customer that one of the plurality of components in the one or more customer sites require attentions by the customer (see column 1, lines 57-58 though column 2, lines 1-15, the status information communicates any equipment trouble to all

of the components given to the vendor by the customer, the equipment trouble is the health of the component).

As per claim 12, Ogushi et al. disclose all the limitations of claim 10, wherein the status information includes the components version information, such that the facilitator can communicate to a customer that one of the plurality of components in the one or more customer sites require a version update (see column 4, lines 22-28, version update must be included in the status information in order for the vendor to eliminate the trouble on the equipment by doing a software upgrade).

As per claim 13, Ogushi et al. disclose all the limitations of claim 10, and that the status information includes customer identification, customer site information, and the component location within the customer's site (see column 3, lines 29-33 and column 4, lines 40-47, all the status information is given to the vendor by a host computer from a factory, all of this information must be included in order for the vendor to look up the problem in the database and fix the equipment).

As per claim 14, Ogushi et al. disclose all the limitations of claim 10, wherein the component information includes customer identification, customer site information, and the component location within the customer's site (see column 5, lines 34-43, the host computer includes customer information when sending the component information to the vendor, all of this information must be included in other associated information in order for the vendor to know what component to fix).

As per claim 15, Ogushi et al. disclose all the limitations of claim 10, wherein the status information includes the component health information and the website can

communicate patch information to at least one of the plurality of components in response to component health information (see column 5, lines 34-43, and column 6, lines 9-19, the host computer includes component health information when sending the status information to the vendor and the vendor uses the internet to communicate patch information back to the host computer).

As per claim 16, Ogushi et al. disclose all the limitations of claim 10, wherein the status information includes all the component version information, such that the website can communicate patch information to at least one of the plurality of components in response to component version information (see column 4, lines 18-28, the status information sent to the host computer through the internet includes information about the operating state, the host computer can then communicate patch information to the equipment, the information about the operating state must also include version information as the host would not be able to update the version if the current version was unknown).

As per claim 17, Ogushi et al. disclose all limitations of claim 10, where in the website transmits a signal to at least one of the plurality of components in response to status information from the component that initiates an action to the component (see column 5, lines 17-39 and figure 3, the vendor host computer transmits the countermeasure in response to the status information by a signal over the internet to the host computer and the component at the factory; if a countermeasure is unavailable, the vendor notifies a person of the equipment status).

As per claim 18, Ogushi et al. discloses a method of providing a status information to a vendor on at least one factory automation component sold by the vendor to at least one customer, comprising the steps of: locating at least one component at a site of at least one customer (see column 2, lines 16-32, a factory automation component sold by a vendor and located at the customer's component site), connecting at least one component to a network connected to a server of the vendor (see column 3, lines 29-33 and 45-48, the network and server are connected through a LAN), communicating periodically component status information from the at least one component to the server of the vendor (see column 4, lines 40-47, the status information is given to the vendor), searching a database located on the server of the vendor for customer identification and component location information corresponding to the status information of the at least one component (see column 4, lines 40-44, the customer identification is given to the vendor and column 5, lines 34-48, the vendor computer receives the status information which is searched on the troubleshooting database), and outputting the customer identification information and component status and location information to the vendor (see column 5, lines 34-43, the vendor receives the customer identification information and status).

As per claim 19, Ogushi et al. disclose all the limitations in claim 18, and that the status information includes an IP address associated with the component and the step of searching includes matching the customer identification information and component location information corresponding to the IP address included in the status information (see column 3, lines 45-48 and column 4, lines 40-47, the host computer and the vendor

communicate through the internet using IP addresses, and the vendor determines the component using the customer information and component location included in the status information).

As per claim 20, Ogushi et al. disclose all the limitations of claim 18, and further include that the step of communicating a signal to at least one component from the server in response to the component status information that initiates an action to at least one component (see column 5, lines 17-33, the host computer receives the status information and restores the equipment or outputs a message to the operator).

As per claim 21, Ogushi et al. disclose all the limitations of claim 18, and that the server determines if the at least one component has enabled the at least one component to receive communication from the server (see column 4, lines 40-57, the host computer on the vendor side and the host computer on the factory side wait for communication from one another).

As per claim 22, Ogushi et al. disclose all the limitations of claim 18, wherein the status information includes component health information of the at least one component (see column 4, lines 31-39, the status information includes an error code representing the contents of the trouble which contain the health information of the equipment).

As per claim 23, Ogushi et al. disclose all the limitations of claim 22, wherein the server communicates patch information to the component in response to health information from the component (see column 5, lines 17-33, the host computer on the vendor side communicates with the host computer on the factory side to try and restore the equipment to its normal state).

As per claim 24, Ogushi et al. disclose all the limitations of claim 18, and that the status information includes version information of the at least one component (see column 4, lines 18-28, the status information sent to the host computer includes information about the operating state, this information must also include version information as the host would not be able to update the version if the current version was unknown).

As per claim 25, Ogushi et al. disclose all the limitations of claim 24, wherein the server communicates version upgrade information to at least one component in response to version information from the at least one component that does not correspond to the latest version (see column 4, lines 22-28, the host computer maintains the equipment through software upgrades on the basis of response information transmitted from the vendor in response to status information).

As per claim 26, Ogushi et al. disclose an electronic signal adapted to be transmitted between at least one site of a customer and a site of a vendor, comprising an algorithm for matching a customer and a customer site location of a factory component with a factory automation component located at the site location based on an address of the component (see column 6, lines 41-56, both the vendor and the factory host computers access the troubleshoot database which allows them to determine the trouble with the equipment from the factory, this information is received on both computers through the internet using TCP/IP protocol).

As per claim 27, Ogushi et al. disclose an electronic signal adapted to be transmitted between at least one site of a customer and a site of a vendor, comprising a

periodic status message provided by a factory automation component, the status message including health information relating to the factory automation component, the factory automation component having an IP address (see column 3, lines 29-48 and column 4, lines 40-47, the factory host computer and the vendor host computer receive and transmit status messages with one another, these status messages contain health information of the factory automation components, the host computers communicate through the internet using IP addresses, and the vendor determines the component using the customer information and component location in the status information).

As per claim 28, Ogushi et al. disclose all the limitations of claim 27, wherein the site of the vendor is a website which matches the IP address of the component with customer identification information and component location information (see column 3, lines 45-48 and column 4, lines 40-47, the host computer and the vendor communicate through the internet using IP addresses, and the vendor determines the component using the customer information and component location included in the status information).

As per claim 29, Ogushi et al. disclose an internet business communication system including the means for matching a factory automated component location and customer identification with status information provided by the factory automated component over the Internet, the status information including the information relating to the health of the component wherein the component is located at a site location of a customer and communicates status information to a site vendor (see column 3, lines 29-

37, the host machine at the factory transmits status information, which includes the health of the component, to the vendor through the internet).

As per claim 30, Ogushi et al. disclose a factory automated component comprising a processor, a memory coupled to a processor and a network interface coupled to the processor for transmitting and receiving data with at least one remote computer system, wherein the factory component communicates status information periodically to the at least one remote computer system (see column 3, lines 29-48, the factory automated component communicates by transmitting signals through the internet with a factory host computer, this host computer then sends status information to the remote vendor host computer which in turn sends responses, or countermeasures, to the host computer at the factory; all computers inherently contain a processor and a memory).

As per claim 31, Ogushi et al. disclose all the limitations of claim 30, and that the status information includes information related to the health of the component (see column 4, lines 31-39, the status information includes an error code representing the contents of the trouble which contain the health information).

As per claim 32, Ogushi et al. disclose all the limitations of claim 30, wherein the status information includes version information of the component (see column 4, lines 18-28, the status information sent to the host computer includes information about the operating state, this information must also include version information as the host would not be able to update the version if the current version was unknown).

As per claim 33, Ogushi et al. disclose all the limitations of claim 30, wherein the component includes an enabled mode for receiving communication from at least one computer and a disabled mode blocking communication from at least one computer (see column 4, lines 40-57, the vendor and the factory computers have enabled communication only when both computers are turned on; therefore if one computer is turned off, communication is disabled and blocked).

As per claim 34, Ogushi et al. disclose a system for monitoring factory automated components electronically, comprising a central server adapted to receive status information from one or more factory automated components located at one or more customer sites, the central server being located at a site of a vendor, wherein the server is configured to match component status information to customer identification information and component location information of one or more factory automated components and output this information to the vendor (see column 3, lines 29-44, an automated factory which uses a host computers at the factory and a host computer at the vendor site to communicate with each other about the status of the industrial equipment at a particular factory site).

As per claim 35, Ogushi et al. disclose all the limitations of claim 34 and status information including components version information, such that the server can communicate to a customer that one or more components require a version update (see column 4, lines 23-28, version update must be included in the status information in order for the vendor to eliminate the trouble on the equipment by doing a software upgrade).

As per claim 36, Ogushi et al. disclose all the limitations of claim 34, and the server transmits a signal to the one or more components via the at least one remote computer in response to status information from the component that initiates an action to the component (see column 5, lines 17-39 and figure 3, the vendor host computer transmits the countermeasure in response to the status information by a signal over the internet to a host computer at the factory; if a countermeasure is unavailable, the vendor notifies a person of the equipment status).

As per claim 37, Ogushi et al. disclose all the limitations of claim 34, wherein the server hosts a website of the vendor and the server matches the component information with the component status information with the customer identification information and component location by using an IP address associated with the component (see column 3, lines 45-48 and column 4, lines 40-47, the host computer and the vendor communicate through the internet using IP addresses, and the vendor determines the component using the customer information and component location included in the status information).

As per claim 38, Ogushi et al. disclose all the limitations of claim 35, wherein the status information includes the components of health information, such that the vendor can communicate to a customer that the one or more components in the one or more customer sites require attention by the customer (see column 3, lines 29-44, and column 5, lines 34-43, the status information includes the health of the equipment and the factory and vendor host computers communicate with one another to alert customers of components that require attention).

As per claim 39, Ogushi et al. disclose a system for providing status information to a vendor on at least one factory automation component sold by the vendor to at least one customer comprising: means locating at least one component at a site of at least one customer (see column 2, lines 16-32, a factory automation component sold by a vendor and located at the customer's component site), means for connecting the at least one component to a network connected to a server of the vendor (see column 3, lines 29-33 and 45-48, the network and server are connected through a LAN), means for communicating periodically component status information from the at least one component to the server of the vendor (see column 4, lines 40-47, the status information is given to the vendor), means for searching a database located on the server of the vendor for customer identification information and component location information corresponding to the status information of the at least one component (see column 4, lines 40-44, state that the customer identification is given to the vendor and column 5, lines 34-48, the vendor computer receives the status information and the status information is searched for on the troubleshooting database), and means for outputting the customer identification and component status and location information to the vendor (see column 5, lines 34-43, the vendor receives the customer identification information and status).

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Cramer et al. (P.N. 5,307,354) discuss a method and apparatus

for error recovery and maintenance in a distributed network. Friedman et al. (P.N. 4,989,139) discuss a system to permit communication between two manufacturing automation networks. Kabe (P.N. 5,604,913) discusses a automated factory having multiple stations in a network.


10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rebecca Bachner whose telephone number is 703-305-1872. The examiner can normally be reached Monday - Friday from 8:00am to 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tariq Hafiz, can be reached at 703-305-9643.

The fax numbers for the organization where this application or proceeding is assigned are as follows:

703-746-7238	[After Final Communication]
703-746-7239	[Official Communications]
703-746-7240	[For status inquiries, draft communication]

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.


Kyle Choi
Patent Examiner
AU 2163